

Application No.: 10/698286

Case No.: 58780US002

REMARKS

Claims 1-28 are pending. Claims 1, 3, 4, 13, 19-21, and 28 have been examined and stand rejected while claims 2, 5-12, 14-18, and 22-27 have been withdrawn from consideration. Applicant asserts that all claims to the elected species are in condition for allowance as set forth more fully below. As claims 1 and 13 are allowable generic claims, claims 2, 5-12, and 14-18 are allowable as well at least on the basis of their dependence upon the allowable generic claims and should be re-introduced for examination.

Objections to the Specification

The Office Action has objected to the specification due to the Abstract containing the word "disclosed." This word has been removed such that the objection may now be withdrawn.

Rejections

Claims 19-21 and 28 stand rejected under 35 USC 102(b) as being anticipated by Kamp (US Pat. 4,899,025). Furthermore, claims 1, 3, 4, and 13 are rejected under 35 USC 103(a) as being unpatentable over Kamp in view of Tamura (US Pat. Pub. 2001/039137). Applicant respectfully traverses these rejections.

Claims 19-21

The Office Action has rejected claim 19 by stating that Kamp discloses all of the elements. Applicant respectfully disagrees. Claim 19 recites an inductive heating device comprising a power supply, a work head, an inductive coupling assembly configured to removably couple the power supply to the work head, the inductive coupling assembly including a primary coil, a secondary coil, and an inductor core, and the power supply being electrically coupled to the primary coil, the secondary coil being electrically coupled to the work head, the primary and secondary coils configured to be magnetically coupled through the inductor core when the inductive coupling assembly is coupled. Note that the inductive coupling assembly is configured to removably couple the power supply to the work head and it is the primary and secondary coils that are configured to be magnetically coupled through the inductor core when the coupling assembly is coupled. Kamp fails to disclose at least these portions of claim 19.

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Kamp discloses a power supply that utilizes a standard transformer having primary coil 24, secondary coil 13, and core 12. This transformer supplies power to two coils 5, 7 wired together, either in parallel as shown or in series. The coils 5, 7 include magnetic cores 6, 8, respectively, that form each work head which generates the heat in a work piece. The cathode ray tube 4 is the work piece, as opposed to the work head. The cores within the coils 5, 7 are independently movable within the coils 5, 7 so as to control the application of heat from the work head (i.e., the cores 6, 8 of coils 5, 7) to the two locations 9, 10 on the work piece (i.e., the CRT 4).

There is no disclosure within Kamp that an inductive coupling assembly is configured to removably couple the power supply to the work head. To the contrary, the power supply of Kamp is connected directly via the transformer to the coils 5, 7 such that the work head (i.e., cores 6, 8 of coils 5, 7) are continuously coupled to the power supply. Thus, claim 19 is allowable over Kamp for at least this reason.

Furthermore, there is no disclosure within Kamp that the primary coil 24 and secondary coil 13 are magnetically coupled through the inductor core when a coupling assembly is coupled. Instead, the primary coil 24 and secondary coil 13 remain permanently magnetically coupled through core 12, as is the case in any fixed transformer assembly. Additionally, the cores 6, 8 of coils 5, 7 are never magnetically coupled together since they perform as independent work heads to apply heat to independent locations of the work piece 4. Claim 19 is allowable over Kamp for this additional reason.

Dependent claims 20 and 21 depend from an allowable claim 19 and are also allowable for at least the same reasons. Furthermore withdrawn dependent claims 22-27 also depend from an allowable claim 19 and are also allowable for at least the same reasons and should be re-introduced for examination on that basis.

Claim 28

The Office Action has also rejected claim 28 by stating that Kamp discloses all of the elements. Applicant respectfully disagrees. Claim 28 recites an inductive heating device comprising a power supply including a primary coil, a cable assembly having a first end coupled to a secondary coil and a second end coupled to a work head, an inductor core, and means for

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removably coupling the cable assembly to the power supply such that the inductor core couples between the primary coil and the secondary coil. Here, it should be noted that for the means for removably coupling the cable assembly to the power supply, the result of this means is that the inductor core couples between the primary coil and the secondary coil.

There is no disclosure within Kamp that provides a means for removably coupling a cable assembly to a power supply. As discussed above, the power supply is directly coupled to the wire 11 leading to coils 5, 7 through the transformer with primary coil 24, secondary coil 13, and core 12. There is disclosed no way to remove the coupling of this wire 11 from the power supply. The only decoupling provided by Kamp would be the decoupling of the work head (core 6, 8) from the work piece 4 by moving the core 6, 8 within the coil 5, 7, but this is unrelated to any coupling and decoupling between the work head and the power supply. Thus, claim 28 is allowable over Kamp for at least this reason.

Furthermore, Kamp fails to disclose that the result of any means for removably coupling the cable assembly to the power supply results in an inductor core coupling between a primary coil and a secondary coil. Primary coil 24 is permanently coupled via core 12 to the secondary coil 13. Coil 5 is never coupled to coil 7. Thus, Kamp also lacks the means for coupling for this additional reason, and claim 28 is allowable over Kamp for this additional reason.

Claims 1, 3, 4

The Office Action has rejected claim 1 by stating that Kamp discloses all of the elements except for the sleeve, but that Tamura provides a sleeve for an electrical connection, such that it would be obvious to combine the sleeve of Tamura with the assembly of Kamp to render claim 1 obvious. Applicant respectfully disagrees. Claim 1 recites an inductive heating device comprising a power supply including a primary coil, an inductive coupling assembly including an inductive coupling sleeve coupled to a first end of a cable assembly, the inductive coupling sleeve having a secondary coil positioned therein, and an inductor core, wherein the inductive coupling assembly is configured to removably couple the cable assembly to the power supply in inductively coupling the inductor core between the primary coil and the secondary coil. Here, it should also be noted that the inductive coupling assembly has a sleeve that has a secondary coil positioned within it and this inductive coupling assembly removably couples a cable assembly to

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a power supply by inductively coupling the inductor coil between the primary coil of the power supply and the secondary coil of the coupling assembly.

Kamp fails to disclose that a secondary coil is part of an inductive coupling assembly that removably couples a cable assembly to a power supply. On the contrary, the secondary coil 13 is permanently coupled to the primary coil 24 by the core 12 as within any fixed transformer assembly such that wire 11 is permanently coupled to the power supply. Additionally, the coil 5 and the coil 7 operate independently and there is no coupling assembly present to couple them together. Thus, Kamp fails to disclose any coupling assembly that removably couples a cable assembly to a power supply. Tamura also fails to disclose any coupling assembly that includes a secondary coil that removably couples to a power supply. Thus, claim 1 is allowable over Kamp, either taken singly or in combination with Tamura, for at least these reasons.

Dependent claims 3 and 4 depend from an allowable claim 1 and are also allowable for at least the same reasons. Furthermore, withdrawn claims 2 and 5-12 depend from an allowable generic base claim 1 and are also allowable for at least the same reasons and should be re-introduced for examination on that basis.

Claim 13

The Office Action has rejected claim 13 in a similar fashion to claim 1 by stating that Kamp discloses all of the elements except for coupling the sleeve to the power supply, but that Tamura provides a sleeve for an electrical connection, such that it would be obvious to combine the sleeve of Tamura with the assembly of Kamp to render claim 1 obvious. Applicant respectfully disagrees. Claim 13 recites a method of inductively heating a target substrate, the method comprising providing a power supply including a primary coil and a first portion of inductor core, coupling a sleeve positioned at a first end of a cable assembly to the power supply, where the sleeve includes a secondary coil and a second portion of inductor core, such that the first and second portions of the inductor core inductively couple, and activating the power supply to inductively heat a work head attached to a second end of the cable assembly. Here, it should be noted that the sleeve includes a secondary coil and a second portion of inductor core and that the sleeve is coupled to the power supply to thereby inductively couple the first portion of the core and the second portion of the core.

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Kamp fails to disclose that a secondary coil and second portion of an inductor core are part of a sleeve at a first end of a cable assembly where a method includes coupling the sleeve to the power supply to inductively couple the first portion of the core at the power supply with the second portion of the core within the sleeve at the first end of the cable assembly. As previously discussed, the primary coil 24 and secondary coil 13 are fixed within a transformer of the power supply such that the secondary coil 13 is not within a sleeve that can be coupled to the power supply. Additionally, Tamura also fails to disclose a secondary coil and second portion of the core within a sleeve at an end of a cable assembly where a method includes coupling the sleeve having the secondary coil and second portion of core to the power supply. Thus, claim 13 is allowable over Kamp, either taken singly or in combination with Tamura, for at least these reasons.

Furthermore, withdrawn dependent claims 14-18 depend from an allowable generic base claim 13 and are also allowable for at least the same reasons. Therefore, withdrawn claims 14-18 should also be re-introduced for examination on this basis.

Conclusion

Applicant asserts that the application including all claims 1-28 is now in condition for allowance. Applicant requests reconsideration in view of the amendments and remarks above and further request that a Notice of Allowability be provided. Should the Examiner have any questions, please contact the undersigned.

April 8, 2005

Date

Respectfully submitted,

By: 

Pamela L. Stewart, Reg. No.: 45,707

Telephone No.: (651) 733-2059

Office of Intellectual Property Counsel
3M Innovative Properties Company
Facsimile No.: 651-736-3833